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# CHAPTER 21

## CUT SLOPE SAFETY

### **A CALTRANS/Cal-OSHA AGREEMENT ON CUT SLOPE SAFETY**

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### **CUT SLOPE SAFETY**

**THIS SPACE AVAILABLE FOR NOTES:**

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# CHAPTER 21

## CUT SLOPE SAFETY

### A CALTRANS/Cal-OSHA AGREEMENT ON CUT SLOPE SAFETY

#### 21.00 INTRODUCTION

This chapter explains the agreement between the Department of Transportation (Caltrans) and the Department of Industrial Relations, Division of Safety and Health (Cal-OSHA) regarding work-associated with cut slopes.

This chapter covers only cut slope operations performed by Caltrans Maintenance Program employees. Other work disciplines, such as engineering geologists, should develop separate operating instructions and/or code of safe operating practices. (See Chapter 11 - CODES OF SAFE WORK PRACTICES for writing techniques and details.)

#### 21.01 PURPOSE

The purpose of this chapter is to explain the provisions of the agreement that relate to specific on-site work while engaged in cut slope activities.

Questions regarding broad policy application should be directed to the Maintenance Program Manager or the Headquarters Office of Safety and Health.

#### 21.02 POLICY STATEMENT

Maintenance Program supervisors responsible for cut slope operations shall comply with the requirements of the agreement.

#### 21.03 PLANNING THE WORK

Before work begins a pre-job conference or tailgate safety meeting shall be held to discuss the work schedule, the effects of adverse weather conditions, slide removal, rockfall, slope renovation, and the various hazards that are known to be associated with cut slope operations.

Supervisors shall review and discuss the Code of Safe Operating Procedures listed in the Caltrans Maintenance Manual, or other applicable code covering cut slope safety.

All equipment, appropriate hand tools, and personal protective safety devices and equipment applicable to the work activity, including illumination, shall be available before the work begins.

**21.04 CUT SLOPE INSPECTIONS**

Before work begins, the supervisor shall make a visual inspection of the work zone to determine if the cut slope is stable, or if a rock slide or other unstable condition may exist. If the inspection reveals that the cut slope is stable, the planned work activity may begin.

If the inspection reveals the cut slope or area surrounding the cut slope shows any sign of rock movement or other unstable condition, the work shall not begin, and the supervisor shall designate an employee as "competent" to inspect the work site.

**NOTE:**

Section 1504(a) of the Construction Safety Orders (CSO) defines a "competent person" as:

"One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them."

The supervisor's decision in determining who is "competent" shall include the following factors:

1. The employee's previous work experience in slide and rock removal and slope maintenance.
2. The employee's understanding of the general effects of rain, temperature changes, wind and freeze/thaw cycles on slope stability, and terrain conditions.
3. The employee's familiarity with the geographical area where the work is to be performed.

The individual identified as the "competent person" shall investigate the work zone to determine if it is safe to enter and begin the planned work activity. If it is determined that the slope is unsafe, no work shall be allowed.

The supervisor and/or area superintendent should contact an appropriate engineering unit for a more detailed investigation and evaluation of the cut slope area.

No work may be permitted until such time that an engineering investigation has been conducted and the cut slope area has been determined to be stable and safe to enter.

**21.05 WORK DURING HOURS OF DARKNESS**

Cut slopes shall be illuminated whenever employees are required to work during the hours of darkness. The illumination shall be of sufficient power to provide adequate visual protection to detect the possibility of rockfall, slides, or slope movement.

The amount of illumination shall be determined by the supervisor based on each particular work situation. The supervisor shall review the scope of the operation, type of natural rock and/or soil material, and the amount and type of equipment involved. Vehicular headlights, spotlight, or more extensive lighting such as portable lights shall be considered.

**21.06 INSPECTIONS DURING ROUTINE MAINTENANCE OPERATIONS**

Whenever employees conduct routine roadway inspections for the purpose of rockfall and/or snow removal they should also make a visual inspection of cut slope areas as they drive by. The purpose of the visual inspection is to detect the amount of rockfall and debris on the roadway and the condition of a cut slope area.

Any amount of rockfall or debris on the roadway should be reported to the supervisor who shall then make a decision to conduct a drive-by visual inspection to determine if a cut slope is stable or unstable.

If a "moving operation" is going to be performed in a cut slope area, the supervisor shall conduct an advance visual inspection of the cut slope and near-by area. The inspection shall be made to ensure that the slope is stable and the moving operation can be performed without fear of rockfall or other debris obstructing the work.

Personnel involved in moving operations in known and active rockfall/slide areas shall maintain radio contact with their radio base station. If radio contact is difficult, occasional visits or telephone calls to the base station is encouraged.

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